



THE USE OF INSTRUMENTS OF LOGISTICS AND MARKETING IN TRANSPORT ENTERPRISES IN LUBUSKIE VOIVODESHIP

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ABSTRACT. Background: The aim of the article is to verify the logistics and marketing instruments used in transport enterprises in Lubuskie voivodeship. The article presents the results of surveys of transport companies. Based on these studies in transport enterprises in Lubuskie, the current level of the use of logistics and marketing instruments was determined. Logistics and marketing instruments were separated to study the needs of transport companies in Lubuskie voivodeship. The choice of these instruments gave rise to a study of the possibility of using them in the implementation of business operations. From the findings it can be inferred that they are useful for the voivodeship, and that such a system can be implemented in the whole country.

Methods: The study was conducted in the second half of 2014 and 140 transport enterprises in Lubuskie. Based on the research results, classifications of instruments were developed using logistics and marketing division at their levels.

Results: On the basis of these findings and observations, the authors have analysed the levels of identification instruments, logistics and marketing. On this basis, it was possible to identify the instruments used by logistics and marketing in these companies.

Conclusions: Based on the study of transport companies in Lubuskie voivodeship, a selection of logistics and marketing instruments were identified, along with a classification of the logistics and marketing instruments used. With the implementation of the above steps to classify the usage level of logistics and marketing instruments, the ability to match these levels to data transport companies was established.

Key words: transport companies, instruments, logistics, marketing tools, transport.

INTRODUCTION

Since Poland's accession to the European Union, there has been a rapid increase in the activity of transport companies in international markets, generating a significant amount of revenue. Not only are Polish companies meeting import and export orders for domestic and foreign customers, they are also moving goods between EU countries and opening their own representative offices abroad, both in the original fifteen and in the new member states.

Transport companies face numerous obstacles and restrictions in their activities

[Witkowski 2015]. One of the key factors hindering the development of such companies is rising operating costs, primarily fuel prices and labour costs. The increase in labour costs is related to an increasingly visible shortage of qualified workers.

Attention is frequently drawn to unfair competition and the lowering of rates. In recent years, especially since 2005, the number of companies operating in the market has increased exponentially. Small companies with one or two vehicles are not able to provide customers with a high standard of service, but compete primarily on price. To make informed decisions, it is necessary to have knowledge of the market environment; its current state,

direction of development, political and social transformations. Surrounding businesses create unequal conditions, depending on the region, industry sector, the size of these companies, their form of ownership, and many other factors [Gierszewska, Romanowska 2003].

It is worth noting that the factors which are related to the business environment are independent of the company and, to a large extent, derived from the policy of the state and market regulation mechanisms. These are influenced by both the overall health and economic situation in the country, and the wider world economy. On the other hand, internal factors associated with the activities undertaken by the company are related to its financial condition, material resources, intellectual capital, organizational structure, development strategy, management methods, entrepreneurship, innovation and quality of products and services [Borowiecki 2010].

THE IMPORTANCE OF LOGISTICS AND MARKETING ACTIVITIES OF ENTERPRISES

In Poland, demand for transport services is growing rapidly [Kauf 2010], and thus the knowledge of logistics and marketing instruments plays an important role.

The number of Polish publications [Sołtysek, Sadowski 2013] devoted to the problems of logistics and marketing instruments has also increased in recent years.

Analyzing a number of definitions, it should be noted that logistics combines more aspects and has increased in importance in more and more areas of the economy. "Logistics can be considered as a new economic function performed by the company" [Nowicka-Skowron 2000]. According to M. Sołtysik [Sołtysik 1994], "Logistics is a field of knowledge of logistics processes in the economy and the art of effective management of these processes".

According to M. Ciesielski, the fairly widely accepted understanding of logistics, which now includes over one hundred

definitions, can be reduced to one of three meanings: [Ciesielski 2006]

- Logistics is an area of economic knowledge on flows of goods and information in the economy;
- Logistics is the concept of process management of such flows based on an integrated approach;
- Logistics processes concern the physical flow of material goods - raw materials, semi-finished products and finished products, as well as related information, occurring both within companies and between them.

To determine the importance of logistics, it is important to identify the structure of logistics processes (Figure 1).

The illustration indicates the modern understanding of the processes that consolidate streams of property and information flows, and their cost efficiency. This concept of logistics processes takes customer service into account; quality, the level of efficiency and customer satisfaction [Skowronek, Sarjusz-Wolski 2003]. These tangible and intangible elements of logistics processes should meet the needs of customers in any location, time or quantity and ensure their proper use.

Logistics management consists of strategy formulation, planning, control and monitoring (which takes place in an effective way and minimizes global costs) of process flow and storage of raw materials, inventory, work in progress, finished goods and related information from the point of origin to the point of consumption in order to adapt to customer needs and satisfy them as well as possible [Witkowski, Kuźdowicz 2003].

Some authors, such as H. Ch. Pfohl [Pfohl 1972] and Christopher M. [Christopher 1998] indicate the importance of logistics and management functions with what S. Abt [Abt 2001] and M. Sołtysik [Sołtysik 2000] called logistics management.

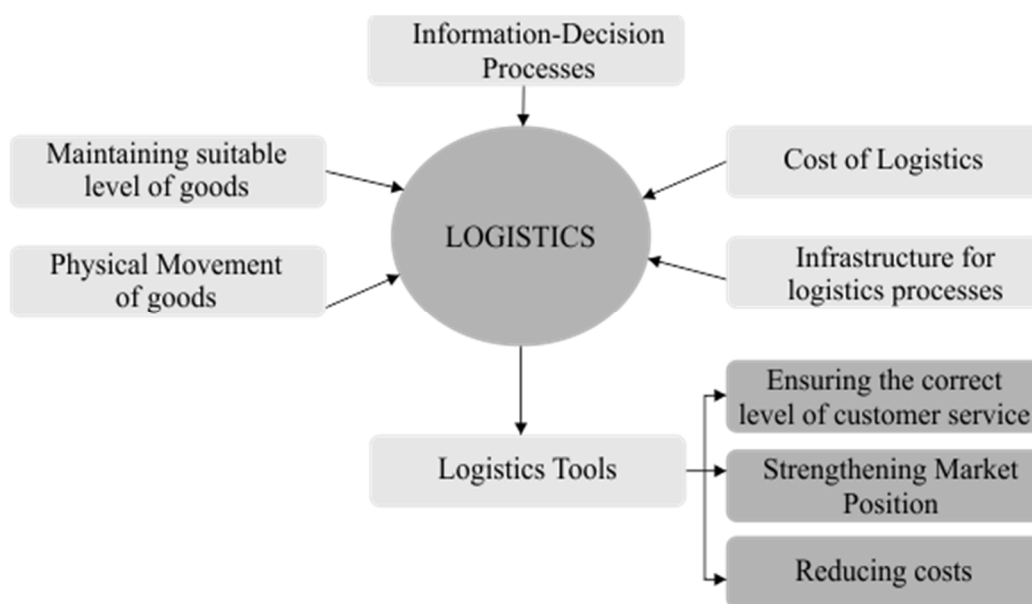


Fig. 1. The main components of logistics processes
 Rys. 1. Podstawowe składniki procesów logistycznych

Many definitions of marketing have also been formulated. Ph. Kotler, G. Armstrong, J. Saunders and V. Wong define it as follows: "This is a management and social process by which individuals and groups obtain what they need and want through creating and exchanging products and mutual values". They cite several other definitions of the term [Pabian 2004]:

- marketing is the process of planning and implementing the concept, pricing, promotion and distribution of ideas, goods and services for a replacement to serve achieve objectives of organizations and individuals;
- marketing is the creation of utility associated with time, place and possession;
- marketing is the provision of relevant goods and services to the right people at the right time and place, at the right price, using the proper communication and promotion;
- marketing is the creation and delivery of standards of living.

Marketing includes all activities and instruments whose immediate goal is to

identify, define and create potential market effects and shape the company's success. In logistics, however, it is mainly concerned with the creation and use of potential efficiency and system support for market-oriented companies, and its integration is focused on creating benefits for clients.

Both elements are up against each other in the form of coupled possibilities for efficient use of the potentials and capacities, contributing to the achievement of the required level of service and long-term customer satisfaction and loyalty, and an appropriate level of profit in the strategic dimension.

An expanded range of aims in marketing and logistics in terms of their integration in the management of logistics and marketing is shown in Figure 2.

The specification and structure of the aims presented here take into consideration the fundamental dimensions of their qualifications and hierarchy, i.e. size of market, company and society [Nowicka-Skowron 2000].

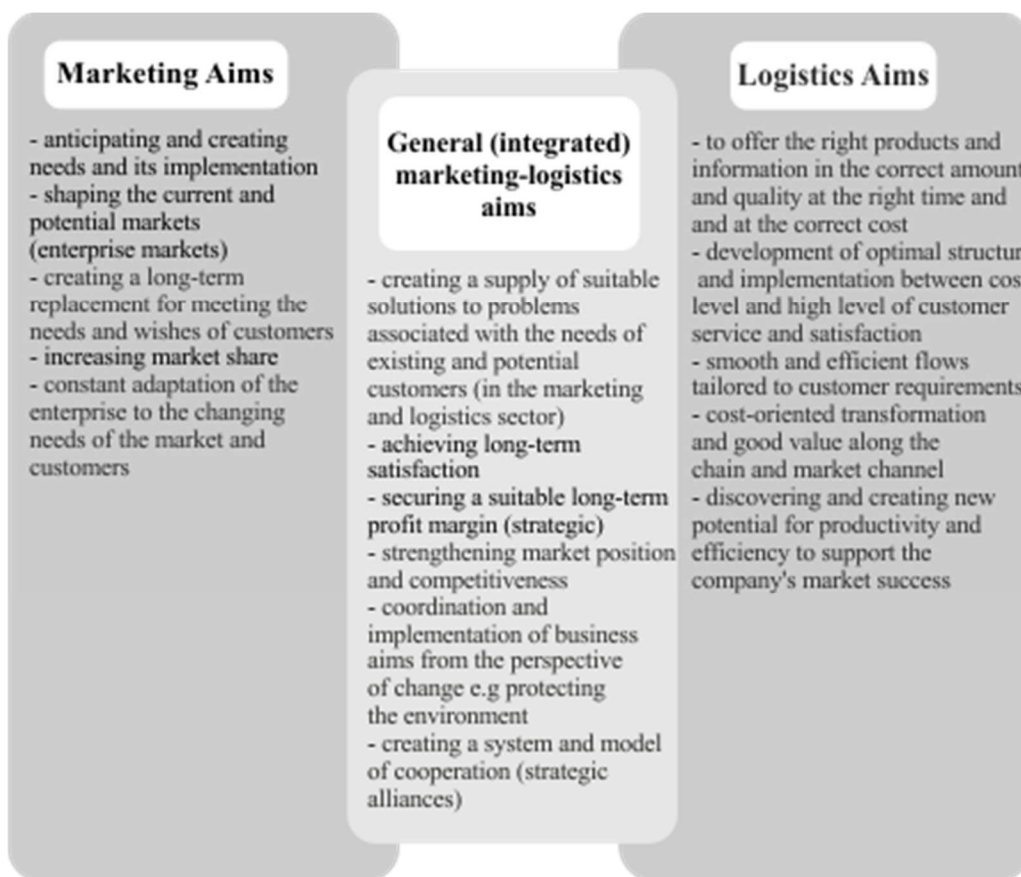


Fig. 2. The main objectives of marketing and logistics
Rys. 2. Podstawowe cele marketingowo-logistyczne

These integrated objectives include bringing the company to the forefront of the market (from the point of view of the customer), separated objectives of creating demand and the optimization of the supply chain (the structure of benefits to customers), solving specific customer problems in marketing and logistics market segments, as well as targets for the achievement of long-term satisfaction and customer loyalty [Pabian 2015].

The main objectives of marketing and logistics considered in the context of the company include the development of an optimal structure of added value and reducing costs along the marketing and logistics value chain, developing an appropriate amount of profit in the long run, and strengthening the company's competitive position in the market, etc. [Blaik, Matwiejczuk 2005]. It is also important to refer to business models [Brzóška, Jelonek 2015]

The described terminology will be used to present knowledge of the logistics and marketing instruments used in transport enterprises in Lubuskie voivodeship.

ANALYSIS OF THE TRANSPORT COMPANIES SURVEYED

Surveys were carried out to assess the scale and mechanisms of use of logistics and marketing instruments. The study included 95 small transport companies and 14 medium-sized transport companies. The study did not include any large companies. The reason for this is the lack of large transport companies operating within Lubuskie voivodeship.

The selection of logistics and marketing instruments was based on literature studies, analysis, interviews and a questionnaire. The break-down of logistics and marketing instruments is presented in the table below (Table 1).

Table 1. Logistics and Marketing Instruments
 Tabela 1. Instrumenty logistyczne i marketingowe

Instruments				
Logistics	Electronic exchanges	ECR	QR	JUST-IN-TIME
Marketing	Form of promotion of enterprises	Form of identification of enterprises	Production Strategy	Pricing Strategy

This table shows four logistical instruments and four marketing instruments. Based on the observation of transport companies in Lubuskie, we created a model to identify those instruments, which can function separately in different functional areas of companies. In

contrast, a new phenomenon in the area of management, especially in the transport enterprises, is to use them as instruments of logistics - marketing. The allocation of instruments to each group is presented in Figure 3.



Fig. 3. Model of logistics and marketing instruments
 Rys. 3. Model instrumentów logistyczno-marketingowych

The illustration indicates that all the instruments of both logistics and marketing may represent a general attempt by transport companies that use these instruments to examine the classification. On the basis of empirical studies, a division of logistics and marketing instruments can be made based on the intensity of their use. The analysis also takes into account other factors; the development of these enterprises, including

their competitive position, their technical infrastructure, the company's image and how it is perceived by competitors and other stakeholders etc. Based on a survey and subsequent analysis, transport companies were classified into four levels. The degree to which individual instruments are used is presented in Table 2.

Table 2. Classification of enterprises taking into account the levels of use of logistics and marketing instruments
 Tabela 2. Klasyfikacja przedsiębiorstw z uwzględnieniem poziomów wykorzystywania instrumentów logistycznych i marketingowych

	Logistics instruments	Marketing instruments
Level I (lowest)	Transport Exchange	Forms of Promotion (min.1) Forms of identifying enterprises (min.1)
Level II	Transport Exchange	Forms of Promotion Forms of identifying enterprises strategy used (product strategy and pricing)
Level III	Transport Exchange and/ ECR and/ or QR	Forms of Promotion Forms of identifying enterprises strategy used (product strategy and pricing)
Level IV (highest)	Transport Exchange ECR QR Just In Time	Forms of Promotion Forms of identifying enterprises strategy used (product strategy and pricing)

Table 2 presents the classification of instruments which are used by transport companies in Lubuskie voivodeship. This classification takes into account the levels of intensity of logistics and marketing instruments, ranking them as follows:

- Level I assumes the use of a single logistics instrument and two marketing instruments. These are freight exchanges and forms of promotion and identification of business. This assumption is determined by a low financial and organizational cost, and a low level of knowledge about the concepts of logistics and marketing applied amongst executives.
- Level II shows the use of at least one logistics instrument and three or four marketing instruments. These are: freight exchanges, forms of promotion and forms of identification of business, pricing strategy and/or product. It can be argued that at this level of the use of logistics and marketing instruments, management personnel within companies are aware of the importance of their application and have the necessary skills to use them in practice.
- Level III shows the use of at least one logistics instrument (e.g. Freight Exchange, QR or ECR) and the use of marketing instruments taking forms such as promotion and forms of identification of business along with pricing or product strategy. Transportation companies using these instruments have the knowledge and ability to use the instruments of logistics and marketing.
- Level IV classifies companies that go beyond the logistics and marketing

instruments already mentioned (freight exchanges, ECR, QR, forms of promotion, forms of identification, pricing strategy or product) and use the philosophy of Just In Time. The study shows that a higher level of awareness of management is demonstrated in the use of JIT. These companies use it to manage at least one freight exchange and the concept of ECR or QR and all marketing instruments. Hence it can be concluded that this level will indicate the highest degree of utilization of logistics and marketing instruments.

The levels described above are illustrated in Figure 4. This shows the classification levels of logistics and marketing instruments used, where Level I is the lowest with the smallest intensity of instruments used, whilst Level IV indicates the highest level of use of these instruments.

Enterprises classified on the last level have the highest intensity of use of the instruments of logistics and marketing. These are companies in which the owners, most often acting as managers, have the necessary knowledge and skills to use these instruments.

Below is table 3, which takes into account the levels of use of instruments of logistics and marketing. The analysis was carried out on the entire sample of 109 surveyed companies. The purpose of this was to analyze the use of logistics and marketing instruments by respondents and formulate the above classification based on the intensity of the instruments used.

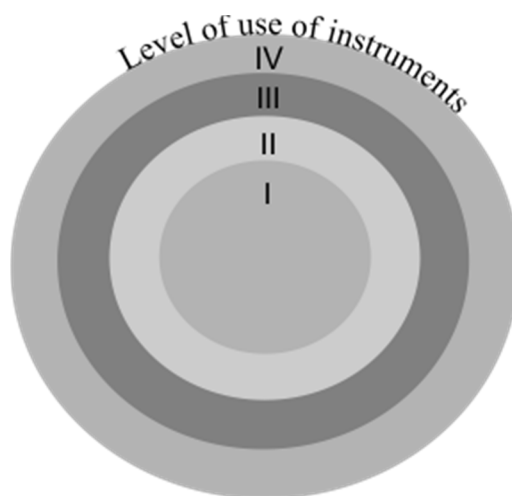



Fig. 4. Levels of classification of the use of logistics and marketing instruments
 Rys. 4. Poziomy klasyfikacji wykorzystania instrumentów logistyczno-marketingowych

Table 3. Analysis of levels of identification of logistics and marketing instruments for the companies surveyed
 Tabela 3. Analiza poziomów identyfikacji instrumentów logistyczno-marketingowych na przykładzie badanych przedsiębiorstw

Instruments	P1	P2	P3	P4	...	P109
Transport Exchange						
ECR						
QR						
JIT						
Internet						
Email						
Press						
Leaflets						
Billboard						
Logo						
Website						
Letterheads						
Business Cards						
Promotional Brochures						
Other						
Product Strategy						
Pricing Strategy						
Level of implementation of logistics-marketing instruments	Level II	Level III	Level III	Level I	Level IV	Level III

 The use of instruments

This division was made on the basis of the above-described Table 3 and Figure 1. The number of enterprises classified at various

levels of use of instruments of logistics and marketing is shown in the table below (Table 4).

Table 4. Classification of the companies surveyed, taking into account the level of use of logistics and marketing instruments
 Tabela 4. Klasyfikacja badanych przedsiębiorstw z uwzględnieniem poziomów wykorzystywania instrumentów logistyczno-marketingowych

Logistics Instruments	Marketing Instruments	Number of Enterprises
Level I		
Transport Exchange	Forms of promotion (min.1) Forms of identifying enterprises (min.1)	4
Level II		
Transport Exchange	Forms of promotion Forms of identifying enterprises strategy used (product strategy and pricing)	49
Level III		
Transport Exchange and/or ECR and/or QR	Forms of promotion Forms of identifying enterprises strategy used (product strategy and pricing)	42
Level IV (HIGHEST)		
Transport Exchange ECR QR Just In Time	Forms of promotion Forms of identifying enterprises strategy used (product strategy and pricing)	15

From fundamental research it can be shown that the fewest enterprises are on the lowest level of use of logistics and marketing instruments (only four companies). This shows a general awareness among transport companies of the existence of these instruments. A significantly greater number of companies were positioned higher - 49 have been classified as level II and 42 as level III. The largest number of companies falls just above the basic level. This means that entrepreneurs are knowledgeable in the field of logistics and marketing instruments used, and the scope of their use by transport companies in Lubuskie voivodeship is at the initial stage of development. This can also be demonstrated by the large number of businesses located on the second level of use of these instruments. It should also be noted that between level III and level IV there is a big gap in the instruments used. 15 companies were located at the fourth position, but the differences in the instruments used are so great that the group may only be used to representatively illustrate the present level of development of these units to a small degree. Overall, we can say that these transport companies are at the initial stage of development due to the logistics and marketing instruments used, and there is the prospect of further development in this industry.

CONCLUSIONS

Based on the study of transport companies in Lubuskie voivodeship, a number of logistics and marketing instruments were identified, along with a classification of the logistics and marketing instruments used. With the implementation of the above steps for the classification of levels of use of instruments of logistics and marketing, the ability to match these levels for data transport companies was established. Knowledge of logistics and marketing instruments in transport enterprises has a significant impact on the market. Research indicates that transport undertakings are reaching the highest level in the use of logistics and marketing instruments. In order to gain a competitive advantage, companies must not only care about their image, developing their business and analyzing the competition, but must also pay an attention to logistics management. Competitive advantage, meeting customer needs more effectively, faster and more efficient operations, a more efficient supply chain and its optimal functioning are just some of the benefits of maintaining a high level of logistics management in the enterprise, including the use of logistics and marketing Instruments. The greater the knowledge, awareness and application of instruments of marketing logistics and transport companies, the greater their contribution to the competitiveness of the Polish market.

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WYKORZYSTANIE INSTRUMENTÓW LOGISTYCZNO-MARKETINGOWYCH W PRZEDSIĘBIORSTWACH TRANSPORTOWYCH WOJEWÓDZTWA LUBUSKIEGO

STRESZCZENIE. Wstęp: Celem artykułu była weryfikacja stosowanych instrumentów logistyczno-marketingowych w przedsiębiorstwach transportowych w województwie lubuskim. W artykule przedstawiono wyniki badań ankietowych przedsiębiorstw transportowych. Aktualnie na podstawie przeprowadzonych badań w przedsiębiorstwach transportowych w województwie lubuskim określono wykorzystywanie instrumentów logistyczno-marketingowych. Wyodrębnienie instrumentów logistyczno-marketingowych było stworzone na potrzeby przebadania przedsiębiorstw transportowych w województwie lubuskim. Taki dobór tych instrumentów dał podstawę do przestudiowania możliwości wykorzystywania ich przy realizacji działalności przedsiębiorstw. Z wyników badań można wywnioskować, iż są one przydatne dla województwa lubuskiego, oraz że taki zestaw może być realizowany w skali całego kraju.

Metody: Badania zostały przeprowadzone w drugiej połowie 2014 roku, w 140 przedsiębiorstwach transportowych w województwie lubuskim. Na podstawie wyników badań, opracowano klasyfikacje wykorzystywanych instrumentów logistyczno-marketingowych z podziałem na ich poziomy.

Wyniki: Na podstawie wyników tych badań i obserwacji, autorzy opracowali analizę poziomów identyfikacji instrumentów logistyczno-marketingowych na przykładzie badanych przedsiębiorstw. Na tej podstawie możliwa była identyfikacja wykorzystywanych instrumentów logistyczno-marketingowych w tychże przedsiębiorstwach.

Wnioski: Na podstawie przeprowadzonych badań przedsiębiorstw transportowych województwa lubuskiego stworzono dobór instrumentów logistyczno-marketingowych, utworzono klasyfikację wykorzystywanych instrumentów logistyczno-marketingowych.

Słowa kluczowe: przedsiębiorstwa transportowe, instrumenty logistyczne, instrumenty marketingowe, transport.

EINSATZ VON INSTRUMENTEN DES LOGISTIK-MARKETING IN TRANSPORTUNTERNEHMEN IN DER WOIWODSCHAFT LEBUS

ZUSAMMENFASSUNG. Einleitung: Das Ziel dieses Artikels war es, die Instrumente von Logistik und Marketing in Transportunternehmen in der Woiwodschaft Lebus zu bewerten. Der vorliegende Artikel stellt Ergebnisse von Umfrage-Forschungen, die in den Transportunternehmen durchgeführt wurden, dar. Aufgrund der in den Transportunternehmen durchgeführten Untersuchungen wurde der aktuelle Einsatz von Instrumenten des Logistik-Marketing in der Woiwodschaft Lebus ermittelt. Die Ermittlung der betreffenden Tools kam zwecks der Bewertung der im Lebuser Lande tätigen Transportunternehmen zustande. Durch eine entsprechende Auswahl der brauchbaren Instrumente ergab sich eine Möglichkeit, sie bei der effektiven Betätigung der Unternehmen in Anspruch zu nehmen. Den Ergebnissen der Forschungsarbeiten ist zu entnehmen, dass sie sowohl innerhalb der Woiwodschaft Lebus als auch in einer solchen Konfiguration im ganzen Lande brauchbar sind.

Methoden: Die betreffenden Untersuchungen wurden in der 2. Hälfte 2014 in 140 Transportunternehmen in der Woiwodschaft Lebus durchgeführt. Anhand der Forschungsergebnisse wurde eine Klassifizierung der angewendeten logistischen Marketing-Instrumente samt der Aufteilung auf deren Niveaus ausgearbeitet.

Ergebnisse: Auf der Grundlage dieser Erkenntnisse und Wahrnehmungen haben die Autoren eine Analyse der Ebenen für die Identifizierung der logistischen Marketing-Instrumente am Beispiel der befragten Unternehmen entwickelt. Anhand dessen war es möglich, die verwendeten Tools des Logistik-Marketing in den betreffenden Unternehmen zu identifizieren.

Fazit: Gestützt auf die durchgeführte Erforschung der genannten Fragestellungen innerhalb der Transportunternehmen in der polnischen Woiwodschaft Lebus wurde eine Vorgehensweise an die Auswahl der logistischen Marketing-Instrumente konzipiert und eine Klassifikation der Tools für das Logistik-Marketing ausgearbeitet.

Codewörter: Transportunternehmen, Logistik-Instrumente, Marketing-Tools, Transport.

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